OIPE
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PATENT & TRADEMARK OFFICE

FIG. 1 A

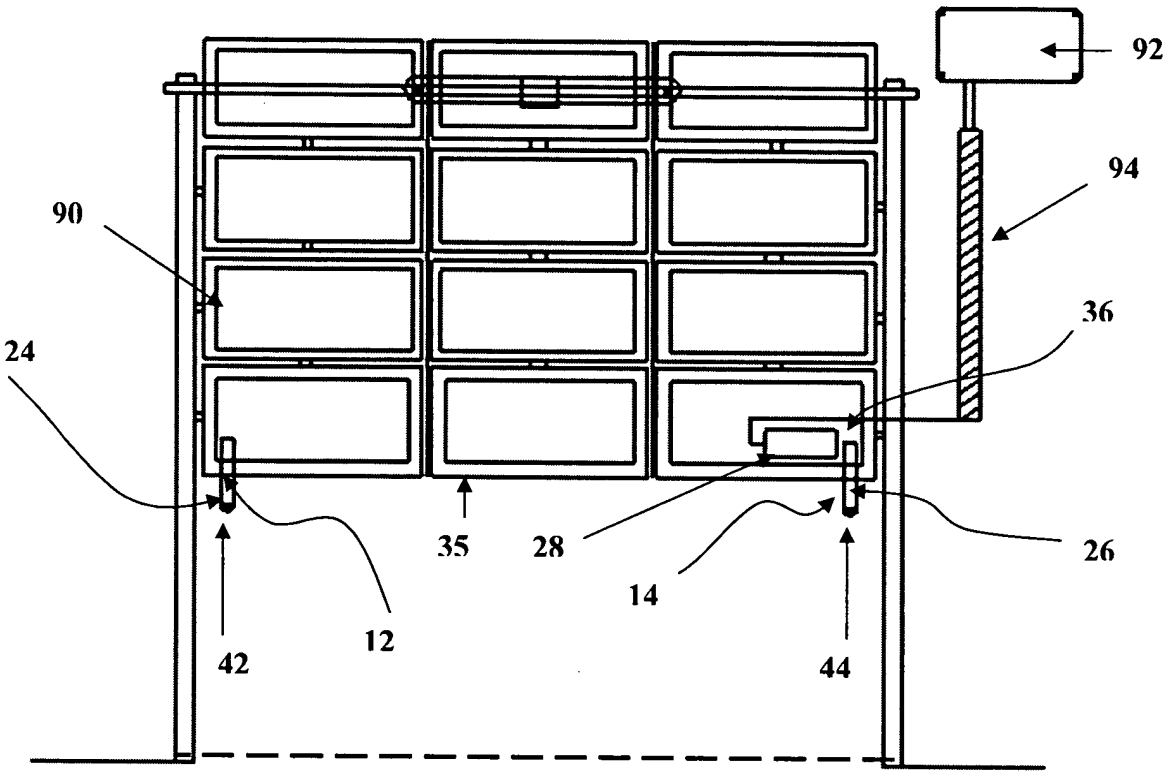


FIG. 1 B

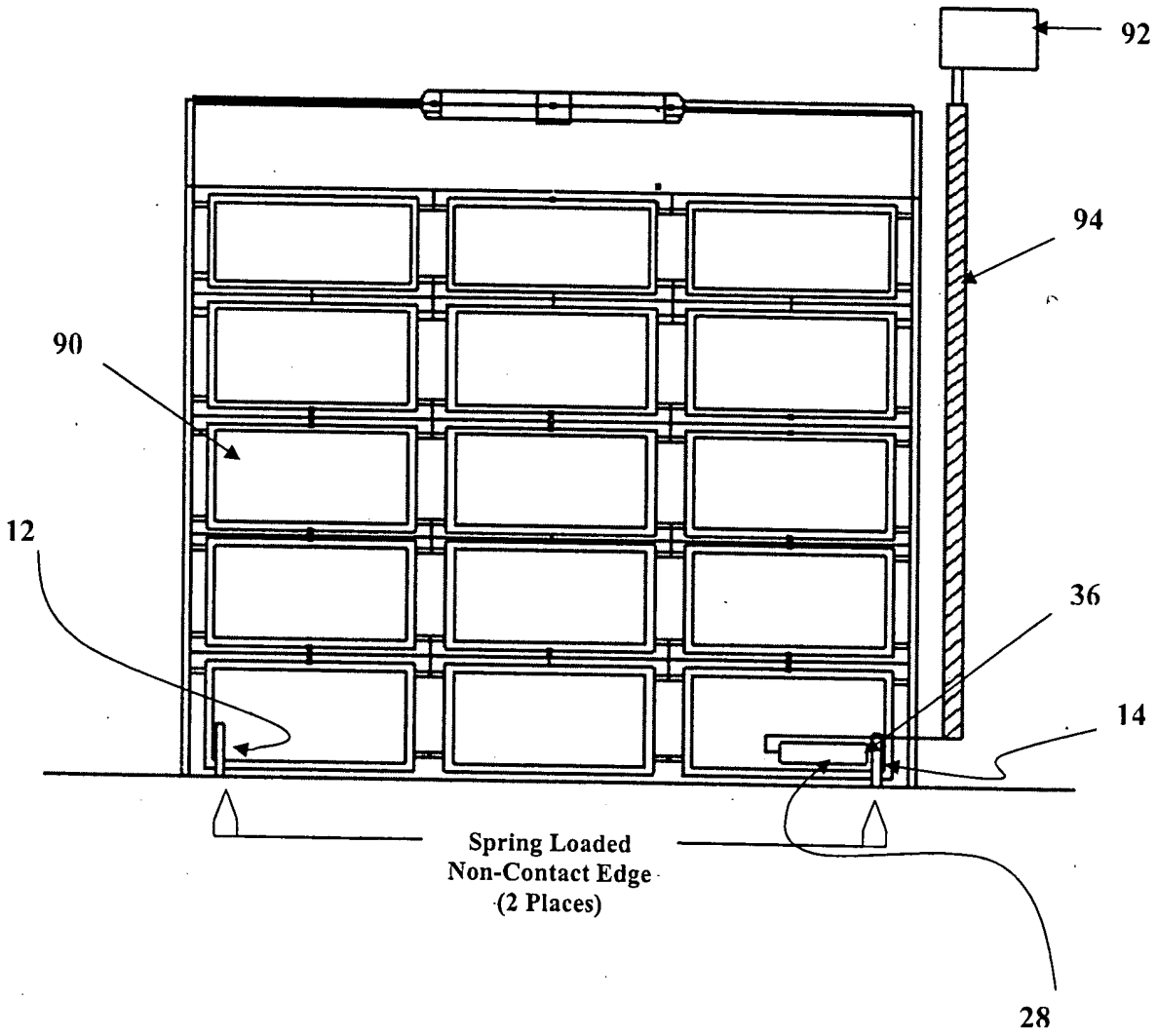


FIGURE 2A

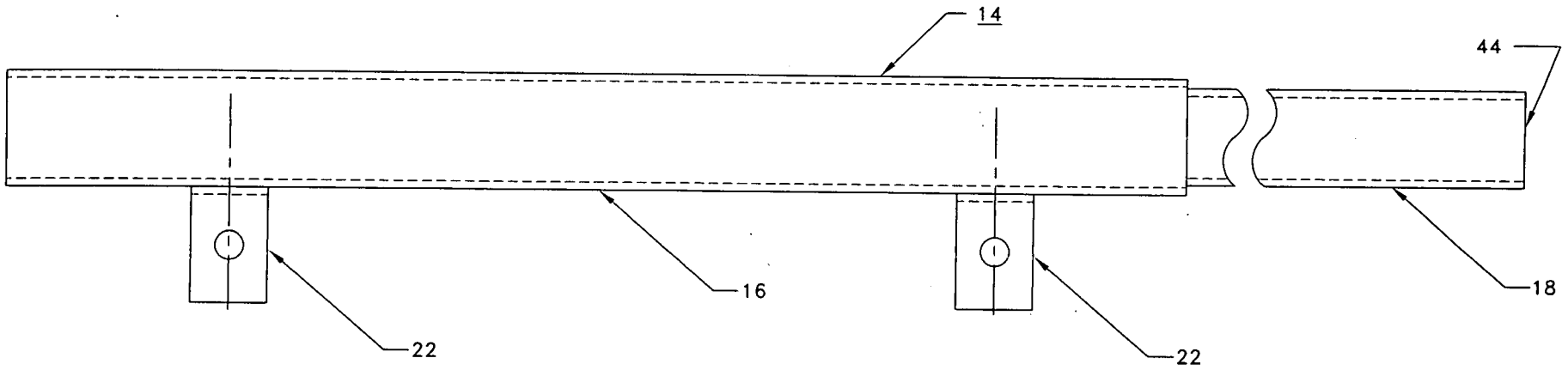


FIGURE 2B

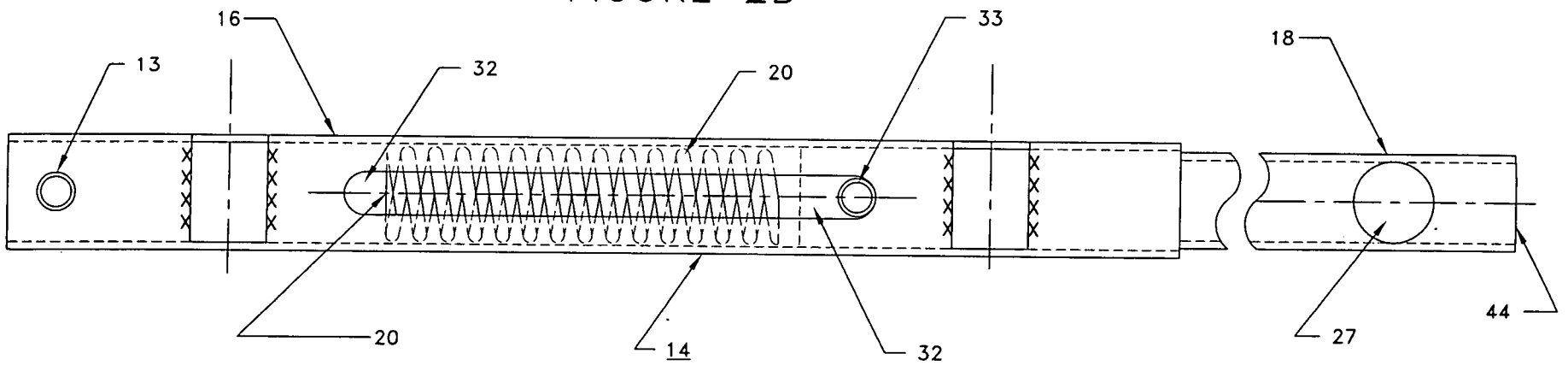


FIGURE 3A

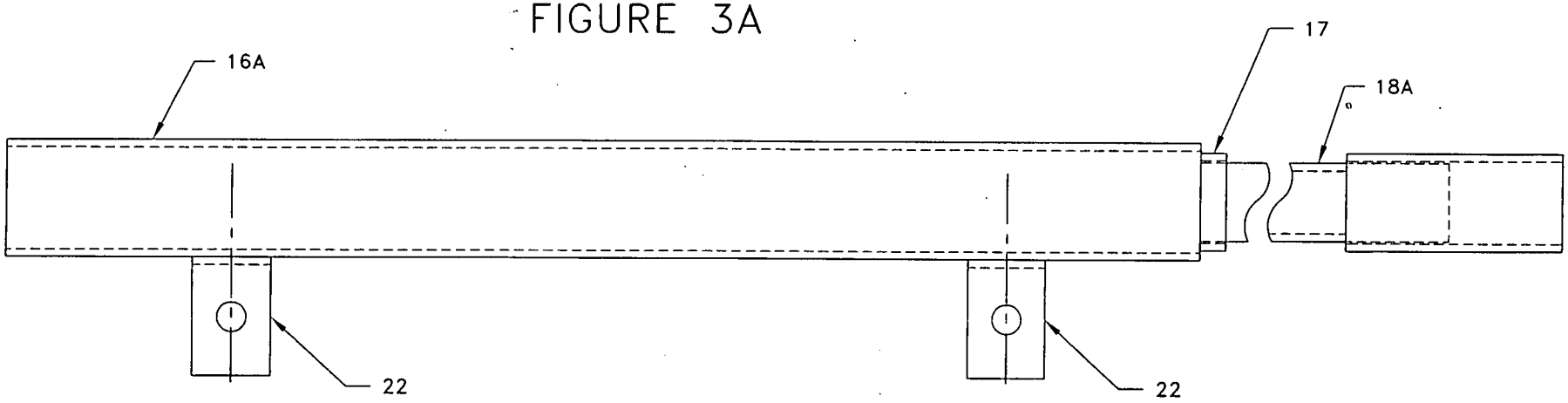


FIGURE 3B

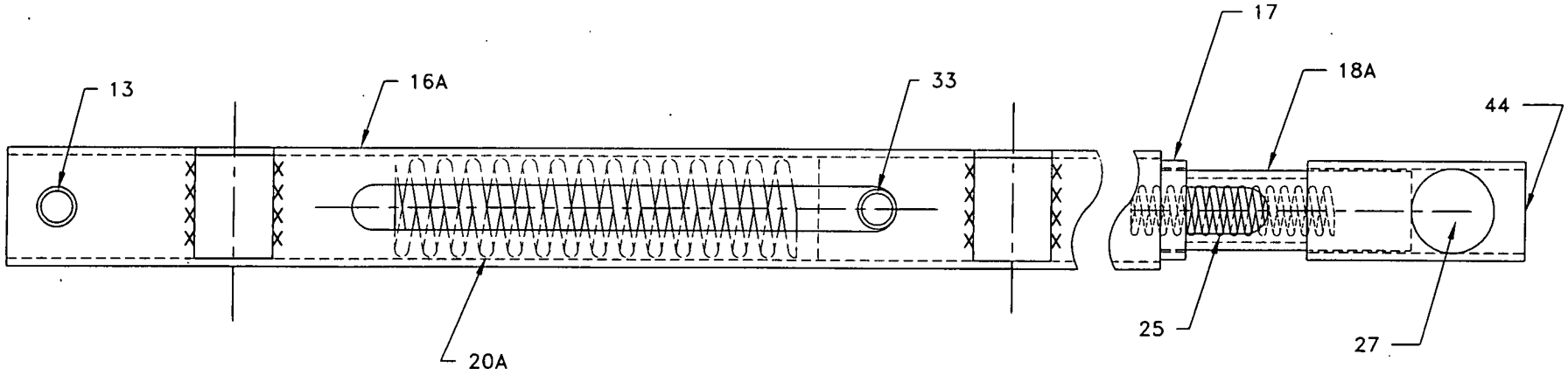


FIGURE 3C

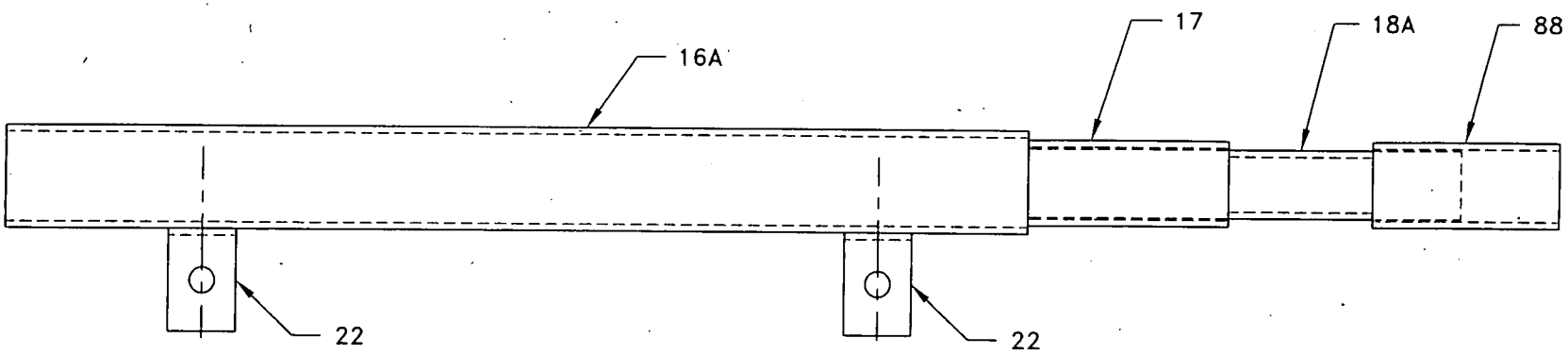


FIGURE 3D

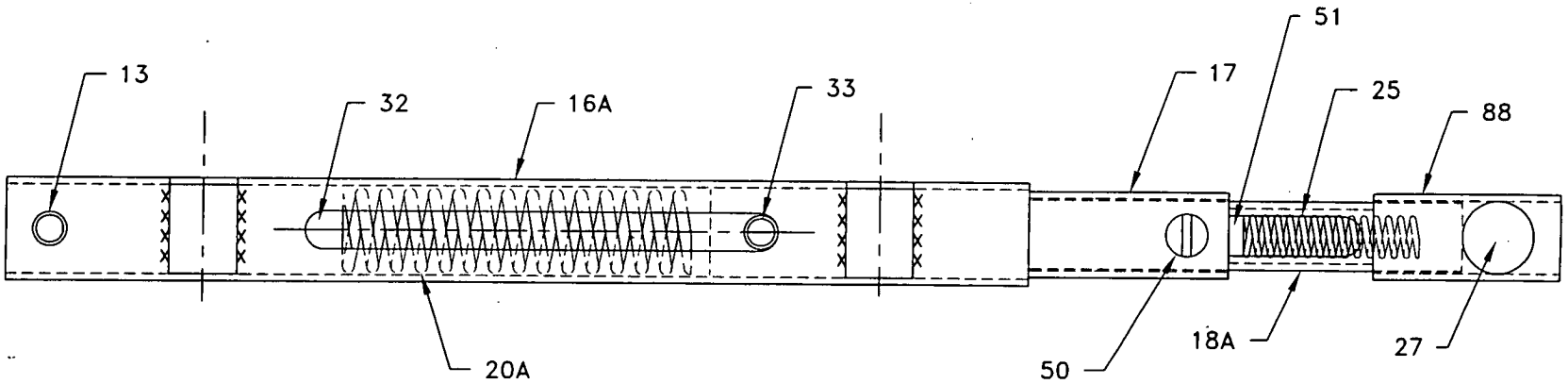


FIGURE 4A

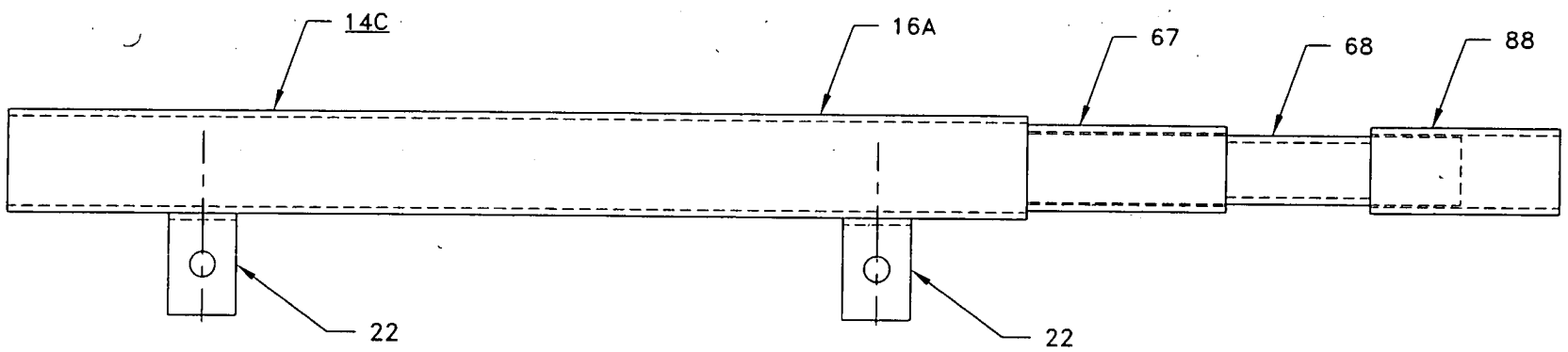


FIGURE 4B

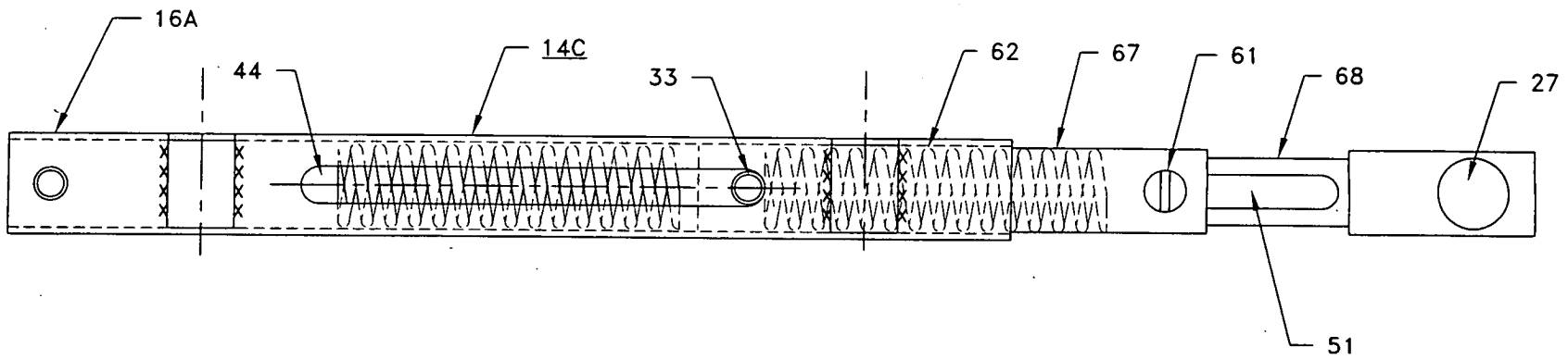


FIGURE 5

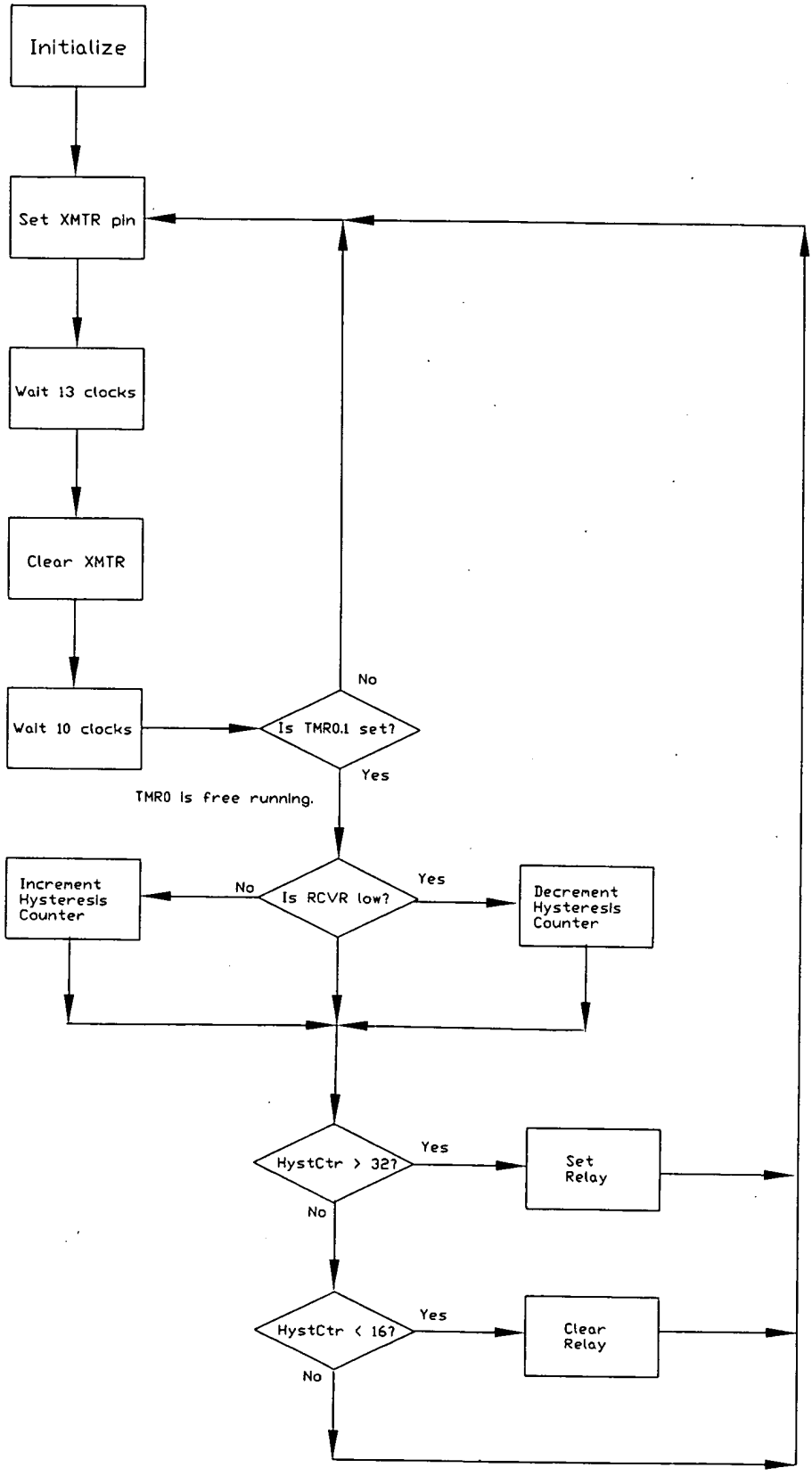
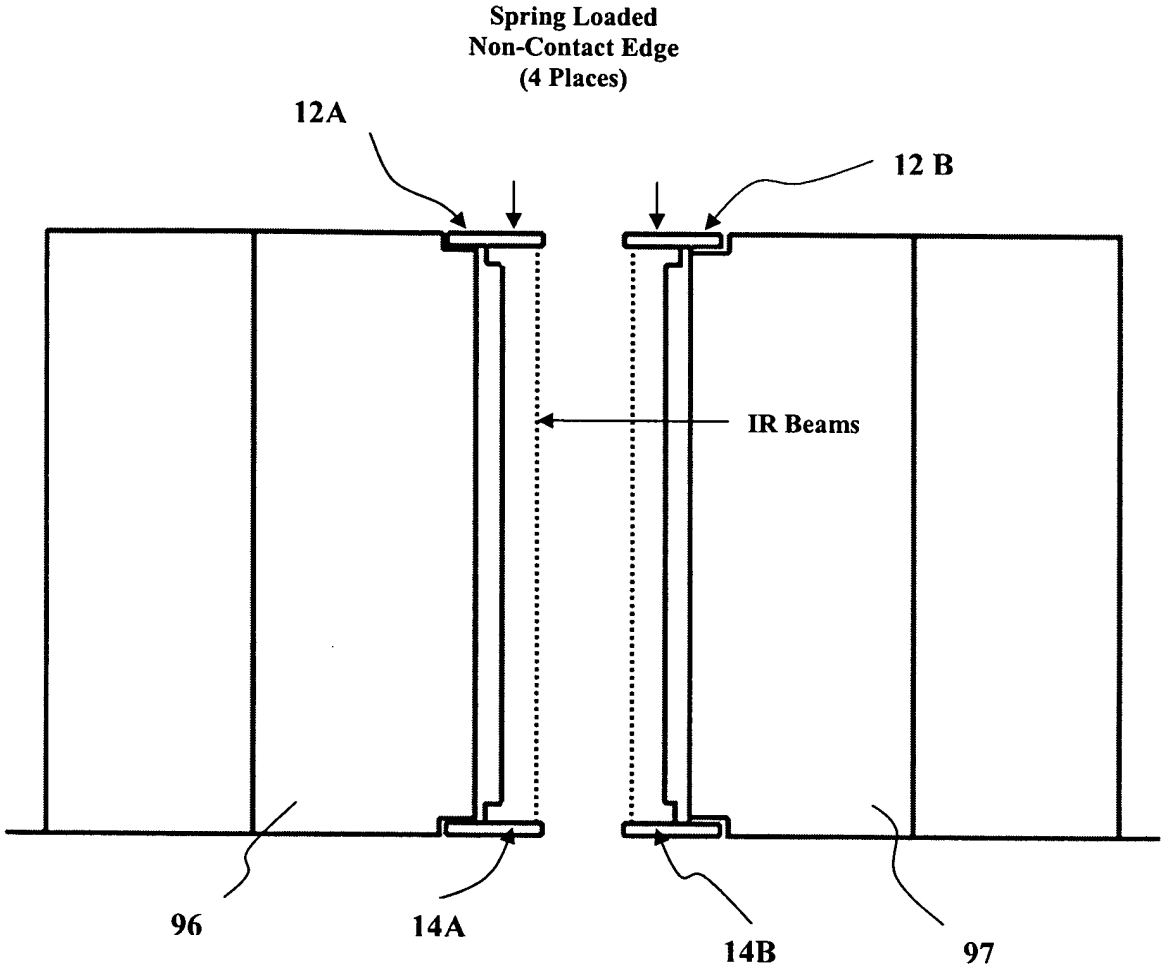

Initialize
Set XMTR pin
Wait 13 clocks
Clear XMTR
Wait 10 clocks
Is TMR0.1 set?
No
Yes
TMR0 is free running.
Increment Hysteresis Counter
No
Is RCVR low?
Yes
Decrement Hysteresis Counter
HystCtr > 32?
Yes
Set Relay
No
HystCtr < 16?
Yes
Clear Relay
No

FIG. 6


Spring Loaded
Non-Contact Edge
(4 Places)
12A
12 B
IR Beams
96
14A
14B
97

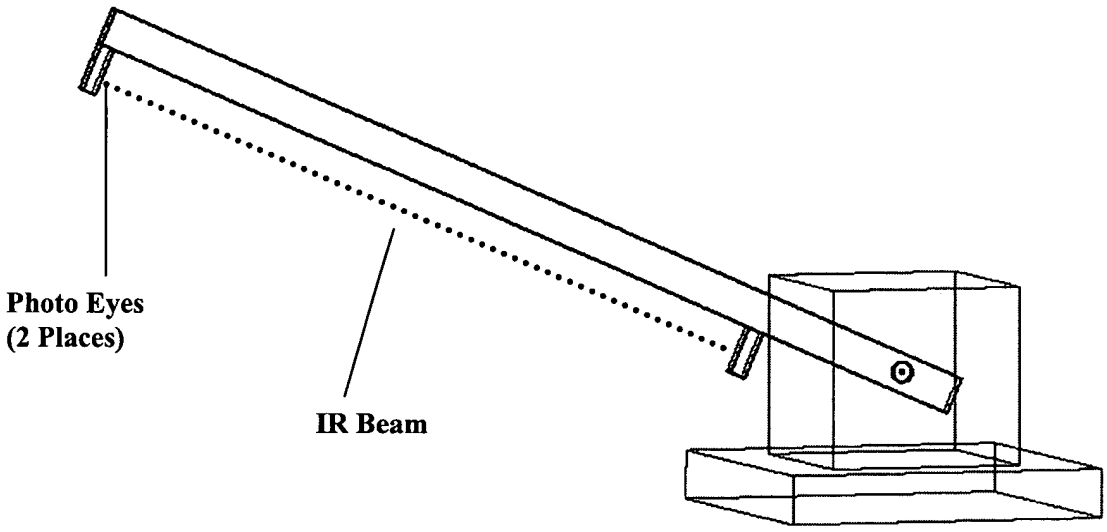



FIG. 7